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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,538	10/23/2001	Reishi Naka	980039.409	4403

500 7590 11/06/2002

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EXAMINER

VERBITSKY, GAIL KAPLAN

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/004,538

Applicant(s)
Naka et al.

Examiner
Gail Verbitsky

Art Unit
2859



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8(1pg) 6) ☐ Other:

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DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119 (a)-(d).

Claim Objections

2. Claims 2- 3, 7 are objected to because of the following informalities:
Claims 2 and 7: "the heat generation area" in line 1 lacks antecedent basis,
Claim 3: "the externally exposed surface" in line 1 lacks antecedent basis.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Hiraoka et al. (U.S. 5251980) [hereinafter Hiraoka].

Hiraoka discloses in Figs. 3c-1, II and 18 a method/ device comprising a thermally resistant substrate (heat resistant material) 1, an object (substance or adhered layer) 100 whose

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thermal conductivity is to be measured (calculated), a heater 21 generating heat between the object and the substrate, a central heating area A and a surrounding area. A temperature difference ΔT_2 between a heated portion and a thermostatic portion of the substrate 1 is measured (col. 11, lines 41-51), and a thermal conductivity of an object (adhered layer) is deduced from it. The opposite side of the substrate is covered with a heat sink (cover member). Temperature gradient is produced from the heated central portion to peripheral portions when a predetermined (col. 15, line 53) central portion is being heated, thus, allowing the thermocouples 31a and 31b to measure said temperature difference.

With respect to claims 1-3: the method steps will be met during the normal operation of the device stated above.

Claim Rejections - 35 U.S.C. § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraoka in view of JP 62172248A [hereinafter JP].

Hiraoka discloses the device as stated above in paragraph 4.

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Hiraoka does not disclose a main heat generating section (means) and an auxiliary heat generating section (means) as claimed by applicant.

JP discloses a device in the field of applicant's endeavor comprising a main heater (heat generating section) 2 and a sub-heater (auxiliary heat generating section) 5 provided around the main heater.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add an auxiliary heater, as taught by JP, to the device disclosed by Hiraoka, so as to heat the surface of interest as uniform as possible, in order to achieve more accurate results of heat conductivity measurements.

7. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hiraoka.

Hiraoka discloses the device and method as stated above in paragraph 4.

In a broad sense, Hiraoka's adhesion layer (object) can be a heat insulating material because when its unknown thermal conductivity is calculated and substantially low, the object can be considered as a thermal insulator. Also, determining of a thermal conductivity/ resistivity of the device means, in a broad sense, determining if the device is a thermal conductor or an insulator.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related methods/devices.

10. Any inquiry concerning this communication should be directed to Examiner Verbitsky who can be reached at (703) 306-5473 Monday through Friday 7:30 to 4:00 ET.

Any inquiry of general nature should be directed to the Group receptionist whose telephone number is (703) 308-0956.

GKV

October 31, 2002

Gail Verbitsky



Patent examiner, TC 2800.